

**APRIL 27, 2001, 1:30 p.m.**

**PROGRAM GOAL: 192 MW**

Program Element	Funds Allocated	Goal in MW	#Grants/Contracts Awarded and/or Pending Approval	AB 970 Funds Committed To Date	Estimated kW Peak Load Reduction	Average \$/Peak kW Reduction
Light Emitting Diode (LED) Traffic Signals	\$10,000,000	10	43 Grants	\$10,000,000	5,967	\$1,676
Innovative Efficiency and Renewables	\$6,350,500	32	8 Grants	\$6,350,500	39,649	\$160
Demand Responsive HVAC and Lighting Building Systems	\$10,448,153	50	1 Interagency Agrmt, 8 Contracts, 5 Grants	\$10,448,153	111,381	\$94
Cool Roofs	\$9,446,500	30	4 Contracts for Cool Roofs and 3 Supporting Services Contracts	\$9,446,500	25,136	\$376
State Buildings and Public Universities	\$5,500,000	50	4 Interagency Agrmts 1 Contract	\$5,500,000	80,000	\$69
Water and Wastewater Treatment Pump and Related Equipment Retrofit	\$6,754,847	20	64 Grants	\$6,718,457	81,510	\$82
Evaluation Contract with Steve Schiller Associates	\$1,500,000		1 Contract	\$1,000,000		
<b>TOTALS</b>	<b>\$50,000,000</b>	<b>192</b>	<b>138 Projects Pending *</b>	<b>\$49,463,610</b>	<b>343,643</b>	<b>\$144</b>
			*This figure does not include evaluation or support services contracts.)			

<b>AB 970 PEAK LOAD REDUCTION PROGRAM SOLICITATION AWARDS</b> <b>APRIL 27, 2001, 1:30 p.m. - ACTIVITY DETAIL BY PROGRAM ELEMENT</b> <b>LIGHT EMITTING DIODE (LED) TRAFFIC SIGNALS</b>				
<b>Original Allocation \$10 Million</b>		<b>Goal: 10 MW</b>		
<b>Applicant</b>	<b>Project</b>	<b>Type of Award</b>	<b>Award Amount</b>	<b>Est. kW Peak Load Reduction</b>
City of Santa Barbara	Install LED's @ 109 Intersections	Grant	\$161,135	146
City of Temecula	Install LED's @ 74 Intersections	Grant	\$140,870	153
City of San Diego	Install LED's @ 1,271 Intersections	Grant	\$1,436,580	576
City of Redding	Install LED's @ 68 Intersections	Grant	\$197,420	121
City of Moreno Valley	Install LED's @ 68 Intersections	Grant	\$60,500	101
City of Westminster	Install LED's @ 60 Intersections	Grant	\$69,310	29
City of Baldwin Park	Install LED's @ 61 Intersections	Grant	\$82,650	59
City of Escondido	Install LED's @ 100 Intersections	Grant	\$145,550	52
City of Victorville	Install LED's @ 45 Intersections	Grant	\$136,000	108
CalTrans	Install LED's throughout State	Grant	\$2,593,360	923
City of Chino Hills	Install LED's @ 32 Intersections	Grant	\$70,940	58
City of Glendale	Install LED's @ 100 Intersections	Grant	\$416,960	207
City of Sacramento	Install LED's @ 198 Intersections	Grant	\$117,000	182
City of Costa Mesa	Install LED's @ 131 Intersections	Grant	\$90,850	137
City of Hesperia	Install LED's @ 18 Intersections	Grant	\$40,470	33
City of San Marcos	Install LED's @ 55 Intersections	Grant	\$135,760	64
Santa Clara County	Install LED's @ 71 Intersections	Grant	\$118,610	48
Town of Apple Valley	Install LED's @ 20 Intersections	Grant	\$46,120	40
City of Rosemead	Install LED's @ 52 Intersections	Grant	\$120,910	117
City of Folsom	Install LED's @ 44 Intersections	Grant	\$12,223	60
City of Paramount	Install LED's @ 41 Intersections	Grant	\$94,180	53
City of Maywood	Install LED's @ 22 Intersections	Grant	\$43,985	28
City of Cudahy	Install LED's @ 15 Intersections	Grant	\$31,775	27
City of Bell Gardens	Install LED's @ 34 Intersections	Grant	\$85,825	56
City of Palm Springs	Install LED's @ 70 Intersections	Grant	\$192,000	147
City of Rancho Mirage	Install LED's @ 35 Intersections	Grant	\$66,760	54
City of Roseville	Install LED's @ 115 Intersections	Grant	\$358,860	264
City of Anaheim Department of Public Works	Install LED's @ 285 Intersections	Grant	\$305,860	139
City of Mission Viejo	Install LED's @ 61 Intersections	Grant	\$93,310	69
City of Eureka	Install LED's @ 24 Intersections	Grant	\$47,460	32
City of Elk Grove	Install LED's @ 46 Intersections	Grant	\$35,990	57
City of Citrus Heights	Install LED's @ 43 Intersections	Grant	\$99,070	27
City of Moorpark	Install LED's @ 16 Intersections	Grant	\$38,960	33
City of Alameda	Install LED's @ 73 Intersections	Grant	\$196,380	112
Town of Woodside	Install LED's @ 1 Intersection	Grant	\$750	0.2
City of Santa Clara	Install LED's @ 45 Intersections	Grant	\$147,000	123
City of Sebastopol	Install LED's @ 2 Intersections	Grant	\$7,550	5
City of South Gate	Install LED's @ 59 Intersections	Grant	\$134,070	103
City of Azusa	Install LED's @ 36 Intersections	Grant	\$29,060	40
City of Palo Alto	Install LED's @ 89 Intersections	Grant	\$224,700	161
County of Sacramento	Install LED's @ 68 Intersections	Grant	\$45,800	51

City of Pasadena	Install LED's	Grant	\$76,060	36
Los Angeles Dept of Water and Power-LA	Install LED's @ 4300 Intersections	Grant	\$1,451,377	1,136
				Average \$/kW Reduct
<b>TOTALS:</b>	43 Projects Pending		\$10,000,000	5,967

## INNOVATIVE EFFICIENCY AND RENEWABLES

Goal: 32 MW
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Average \$/P Reduction
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<b>AB 970 PEAK LOAD REDUCTION PROGRAM SOLICITATION AWARDS</b> <b>APRIL 27, 2001, 1:30 p.m. - ACTIVITY DETAIL BY PROGRAM ELEMENT</b> <b>DEMAND RESPONSIVE HVAC AND LIGHTING BUILDING SYSTEMS</b>				
<b>Original Allocation: \$10 Million</b>		<b>Goal: 50 MW</b>		
<b>Applicant</b>	<b>Project</b>	<b>Type of Award</b>	<b>Award Amount</b>	<b>Est. kW Peak Load Reduction</b>
Department of General Services	Provide demand responsive system (install infrastructure to monitor and verify peak savings achieved by peak load reduction strategies) and perform peak load reduction test	Interagency Agreement	\$1,250,000	10,663
Apogee	With SDG&E, recruit approx. 100 customers with connected load of 50 MW minimum into their demand exchange program.	Contract	\$422,915	5,000
San Diego Regional Energy Office	Recruit 250 customers to install demand responsive systems and participate in either SDG&E voluntary reductions or ISO demand relief program	Contract	\$1,060,505	3,120
City of Roseville	City will sign up 22 large customers, with greater than 500 kW and 10-13 customers with loads from 250 kW to 500 kW.	Contract	\$956,000	10,000
Enron	Install demand responsive systems to achieve 18 MW savings from existing customers	Contract	\$1,500,000	7,500
PG&E	Install demand responsive systems and meters to a connected load of approx 300 MW, gaining a potential reduction of 30 to 50 MW from large and medium customers	Contract	\$1,411,026	35,000
Siebens	Install demand responsive systems in 5 - 8 large hotels and aggregate their load into ISO or PX program	Contract	\$309,950	1,300
Sacramento Municipal Utility District	Install demand responsive systems at 10 sites, allowing for load bid into demand exchange, and 10 buildings will be hooked to direct or automatic load control programs	Contract	\$802,500	20,000
Cisco Systems	Install HVAC and Lighting Building System	Grant	\$40,460	1,250
Alameda County	Install HVAC and Lighting Building System	Grant	\$260,964	1,248
Global Energy Partners	Recruit approx 100 non-residential customers with connected loads greater than 1 MW	Contract	\$1,400,000	12,000
Hewlett-Packard	Install HVAC and Lighting Building System	Grant	\$445,693	1,813
Foothill College District-De Anza	Install HVAC and Lighting Building System	Grant	\$283,140	1,267
General Services Administration	Install HVAC and Lighting Building System	Grant	\$305,000	1,220

					Averag
					kW Re
<b>TOTALS:</b>	14 Projects Pending		\$10,448,153		111,381

## COOL ROOFS

Goal: 30 MW
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## STATE BUILDINGS AND PUBLIC UNIVERSITIES

Goal: 50 MW
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Average :  
kW Redu



<b>AB 970 PEAK LOAD REDUCTION PROGRAM SOLICITATION AWARDS</b> <b>APRIL 27, 2001, 1:30 p.m. - ACTIVITY DETAIL BY PROGRAM ELEMENT</b> <b>WATER AND WASTEWATER TREATMENT PUMP AND RELATED EQUIPMENT RETROFIT</b>				
<b>Current Allocation: \$5 Million</b>		<b>Goal: 20 MW</b>		
<b>Applicant</b>	<b>Project</b>	<b>Type of Award</b>	<b>Award Amount</b>	<b>Est. kW Peak Load Reduction</b>
City of San Diego	Install Water Turbine	Grant	\$360,000	1,200
City of San Diego	Install Back-Up Generator and ISO Program	Grant	\$486,000	2,513
City of Gilroy	Increase Reservoir Capacity	Grant	\$236,310	788
City of Filmore	Retrofit three wells	Grant	\$175,500	585
Hetch Hetchy Water and Power	Lighting retrofit, modification of ozone air compressor with VFD, and impeller trim of one 46 MGD pump	Grant	\$75,840	253
Santiago County Water District	Installation of new SCADA system	Grant	\$38,100	127
Moulton Niguel Water District	Convert two pump stations to flow control facilities and remove two pumps from service at each station	Grant	\$100,500	335
Moulton Niguel Water District	Increase pump station capacity and install check valves	Grant	\$84,000	280
Moulton Niguel Water District	Addition of fifth 2,800 gpm pump to increase amount of water in storage	Grant	\$111,900	373
Moulton Niguel Water District	Replace 500 gpm booster pump by 1750 gpm pump	Grant	\$51,000	170
Moulton Niguel Water District	Complete 1.4 million gallon storage reservoir and new pump controls	Grant	\$120,300	401
Moulton Niguel Water District	Complete pipeline and convert reservoir to recycled waster storage	Grant	\$50,400	168
Centerville Community Services District	Install radio telemetry control system to replace hardwired tone telemetry and relay locig control system	Grant	\$23,200	116
Eastern Municipal Water District	Install Symbio Sensor Monitoring System to measure Nicotainamide Adenine Dincleotide concentration to more effectively determine oxygen demand and control aeration process	Grant	\$39,000	130
City of Escondido	Procure and install 12 microturbines for digester gas	Grant	\$90,000	300
Metropolitan Water District of Southern California	Engineering and installation of telemetry, metering and related equipment to enable participation in the ISO's Summer 2001 Demand Relief Program.	Grant	\$247,770	35,000
Idyllwild Water District	Upgrade aeration system, replace two motors	Grant	\$9,000	30
Town of Apple Valley	Remove and replace two existing fifty horsepower pumps and motors with two new twenty horsepower pumps and motors	Grant	\$13,428	45
Yuba City	Install premium efficiency motors, sluice gates at oxygen reactors, air evaporators, VFD's, use and store LOX, and install energy management systems	Grant	\$166,000	554

Padre Dam Municipal Water District	Water Pump Station No. 2: Install an additional 150 hp pump, and ancillary facilities	Grant	\$12,660	42
Union Sanitary District	Redesign and refurbish 750 kW engine generator and add 550 kW engine generator	Grant	\$357,000	1,190
Eastern Municipal Water District	Purchase and install two 30 kW Capstone micro-turbines	Grant	\$18,000	60
City of San Diego Water Department	Direct control 5 of BUG's - ISO	Grant	\$163,000	1,780
City of San Diego Water Department	Retrofit 16 BUG's with emission controls	Grant	\$480,000	8,500
El Dorado Irrigation District	Replace one 200 hp blower with a 100 hp and automate blower controls	Grant	\$49,500	165
Groveland Community Services District	Upgrade water treatment plant control system	Grant	\$40,513	230
City of Kerman	Replace aerators, pumps, install VFD's	Grant	\$26,000	87
San Elijo Joint Powers Authority	Install three microturbines for digester gas	Grant	\$25,200	84
Westwood Community Services District	Install pump(s)/SCADA system, and related appurtenances	Grant	\$58,340	200
City of San Bruno	Incorporate changes to motor controls, add programmable logic controllers at each booster station, communications infrastructure, and human machine interface and data logger and write custom control program	Grant	\$237,300	791
United Water Conservation District	Replace two pump and motor assemblies at drinking water wells	Grant	\$25,020	83
Tahoe-Truckee Sanitation Agency	Install premium efficiency motors, lighting upgrades, controls and HVAC	Grant	\$48,715	180
City of Pinole	Replace non-operational co-generation system	Grant	\$64,200	214
City of Los Angeles Bureau of Sanitation	City of Los Angeles will use this grant to complete four tasks (this is one of four) at Hyperion Wastewater Treatment Facility, adding electrical devices, modification of a blower blade, installation of 18 power planner III series voltage reducing motor conditioners, and retrofitting of lighting system.	Grant	\$11,000	60
City of Los Angeles Bureau of Sanitation	Two of four - see above	Grant	\$24,000	80
City of Los Angeles Bureau of Sanitation	Three of four - see above	Grant	\$43,500	146
City of Los Angeles Bureau of Sanitation	Four of four - see above	Grant	\$6,570	22
Lompico County Water District	Construct Well No. 7A to provide additional supply, enabling off-peak production and eliminating peak hour electricity load	Grant	\$24,599	82
City of Fresno	Wastewater reclamation pump motors and waterwell motor replacements	Grant	\$60,030	200

Trabuco Canyon Water District	Upgrade facility to allow off-peak pumping operation	Grant	\$28,200	94
City of Vacaville	Install refurbished engine-generator, move inactive cogeneration unit, reconfigure gas fuel supply systems, install an engine heat recovery system, new air/fuel ratio control system, and all associated equipment and controls	Grant	\$84,750	283
Montalvo Municipal Improvement District	Replace coarse bubble diffusers with fine bubble diffusers	Grant	\$7,110	24
Riverside Highland Water Company	Shut down two booster pumps during peak by balancing pressure between two reservoirs, and make pipeline improvements	Grant	\$30,957	334
Inland Empire Utilities Agency	High efficiency motor installation, microturbine installation, and energy recover generator rebuild	Grant	\$115,200	384
San Simeon Community Services District	Replace plant's compressed air system and install an energy management system	Grant	\$11,850	40
Atwater Wastewater Treatment Plant	Modify on-site power distribution and power quality improvements, add VFD's and controls for pumping optimization	Grant	\$20,790	69
Novato Sanitary District	Replace existing jet aeration mixing system	Grant	\$59,805	199
Eastern Municipal Water District	Replace existing method of measuring dissolved oxygen in the activated sludge process	Grant	\$172,200	574
City of Corona	Replace pumps and motors with high efficiency units	Grant	\$35,400	124
Palmdale Water District	Replace motors, bowls, and impellers on well sites, replace existing A/C carrier unit, install motor monitoring system and two booster stations	Grant	\$135,140	455
City of Visalia	Conversion of existing digester gas-fueled cogeneration engine blower to electric generator.	Grant	\$90,000	300
Bear Valley Community Services District	Replace pumps with high efficiency pumps and motors and SCADA or time clocks	Grant	\$13,080	46
Central Contra Costa Sanitary District	Increase output of co-generation system	Grant	\$60,000	200
City of Oceanside	Energy management systems at two wastewater plants	Grant	\$97,200	324
East Bay Municipal Utility District	Energy management systems, oxygen controls and primary treatment modifications	Grant	\$628,000	790
Nacimiento Water Company	Improve controls to allow automatic off peak operation	Grant	\$10,540	53
City of Burbank	Automatic controls to shift pumps to off peak	Grant	\$37,880	550
City of Santa Fe Springs	Variable speed drive and controls to allow off peak operation	Grant	\$22,500	75
North Marin Water District	Replace pumps and automate operation schedules	Grant	\$10,650	36

Hopland Public Utilities District	Replace motors w/energy efficient models and install controls to reduce peak period operations	Grant	\$13,350	122
Hopland Public Utilities District	Replace wastewater aeration with solar powered aerators	Grant	\$27,180	91
Northridge Water District	Construct pipeline hydro-generation facility to replace electric utility power	Grant	\$102,600	342
City of Lompoc	Install EMS @ W & WW plants, retrofit lighting w/efficient lamps, ballast, and controls	Grant	\$44,197	147
Chino Basin Watermaster	Groundwater storage proposals to provide ability to load shed when energy is limited	Grant	\$606,483	18,290
				Average
				kW Redt
<b>TOTALS:</b>		64 Projects Pending	\$6,718,457	81,510

<b>\$/Peak kW Reduction</b>
\$1,104
\$921
\$2,494
\$1,632
\$599
\$2,390
\$1,401
\$2,799
\$1,259
\$2,810
\$1,223
\$2,014
\$643
\$663
\$1,226
\$2,121
\$2,471
\$1,153
\$1,033
\$204
\$1,777
\$1,571
\$1,177
\$1,533
\$1,306
\$1,236
\$1,359
\$2,200
\$1,352
\$1,483
\$631
\$3,669
\$1,181
\$1,753
\$3,750
\$1,195
\$1,510
\$1,302
\$727
\$1,396
\$898

	\$2,113
	\$1,278
Peak	
ion	
	\$1,676

\$/Peak kW Reduction
\$90
\$244
\$250
\$250
\$250
\$250
\$276
\$250
Peak kW
\$160

<b>\$/Peak kW Reduction</b>
\$117
\$85
\$340
\$96
\$200
\$40
\$238
\$40
\$32
\$209
\$117
\$246
\$223
\$250



Cost \$/Peak Production

\$94

\$/Peak kW Reduction
\$367
\$349
\$441
\$351
k
\$376

\$/Peak kW Reduction
\$250
\$563
\$25
\$80
\$25
\$/Peak Reduction
\$69

<b>\$/Peak kW Reduction</b>
\$300
\$193
\$300
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\$/Peak uction	
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